PTO/SERVING (06.47)
Approved for use through 11/3002007, 0480 6915-093
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless its control number.

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT
( Not for submission under 37 CFR 1.99)

Application Number		10617979
Filing Date		2003-07-11
First Named Inventor Henkin		in et al.
Art Unit		1637
Examiner Name Samu		uel C. Woolwine
Attorney Docket Number		22727/04130

				Attorn	ey Docl	ket Number		22727/04130			
					U.S.F	PATENTS					
Examiner Initial*	Cite No	Patent Number	Kind Code <sup>1</sup>	Issue C	Issue Date Name of Patentee or Applicant		Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear				
	1										
If you wis	to a	l dd additional U.S. Pater	nt citatio	n inform	ation pl	ease click the	Ac	dd button.			
			U.S.P	ATENT	APPLIC	CATION PUBI	LIC	CATIONS			
Examiner Initial*	Cite No	Publication Number	Kind Code <sup>1</sup>	Publica Date	ation Name of Patentee of Applicant R		Relev	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear			
	1										
If you wis	to a	dd additional U.S. Publi	shed Ap	plication	citation	n information p	ple	ase click the Add	d butto	n.	
				FOREIG	GN PAT	ENT DOCUM	IEN	NTS			
Examiner Initial*	Cite No	Foreign Document Number <sup>3</sup>	Country Code <sup>2</sup>		Kind Code4	Publication Date	A	lame of Patente Applicant of cited Document		Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T5
/S.W./	1	2004/007677	wo			2004-01-22	Т	he Ohio State Uni	versity		
If you wis	to a	dd additional Foreign Pa	atent Do	cument	citation	information p	lea	se click the Add	buttor	)	
			4ON	I-PATEI	NT LITE	RATURE DO	CL	JMENTS			
Examiner Initials*	Cite No	Include name of the at (book, magazine, journ publisher, city and/or of	nal, seri	al, symp	osium,	catalog, etc),					T5

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

( Not for submission under 37 CFR 1.99)

Application Number		10617979
Filing Date		2003-07-11
First Named Inventor Henki		in et al.
Art Unit		1637
Examiner Name Samu		uel C. Woolwine
Attorney Docket Number		22727/04130

/S.W./	1	Artsimovitch, I., et al., "RNA polymerases from Bacillus subtilis and escherichia coli differ in recognition of regulatory signals in vitro", (2000) J. Bacteriol. 182, 8027–6035.	
	2	Grandoni, J. A., et al., "Regions of the Bacillus subtilis ilv-leu Operon involved in regulation by Leucine" (1993) J. Bacteriol. 175, 7581–7593.	
	3	Grundy, F. J., et al., "Interaction between the acceptor end of tRNA and the T box stimulates antitermination in the bacillus subtilis tyrS gene: a new role for the discriminator base" (1994) J. Bacteriol. 176, 4518–4526.	
	4	Grundy, F. J., et al., "tRNA determinants for transcription antiterminatin of the bacillus subtilis tyrS gene". (2000) RNA 6, 1131–1141.	
	5	Grundy et al., "Monitoring uncharged tRNA during transcription of the bacillus subtilis glyQS Gene", (2005) J Mol Biol, 346, 73-81.	
	6	Hager, D. A., et al., "Use of mono Q high-resolution ion-exchange chromatography to obtain highly pure and actdive escherichia coli RNA polymerase", (1990) Biochemistry 29, 7890–7894.	
	7	Hurwitz et al., "The intracellular concentration of bound and unbound magnesium ions in escherichia coll", (1967) J of Biol. Chemistry, 242, 3719-3722.	
	8	Landick, R., Turnbough, C. L., Jr., & Yanofsky, C. (1996) in Escherichia coll and Salmonella: Cellular and Molecular Biology, eds. Neichardt, F. C., Curtis, R., III, Ingraham, J. L., Lin, E. C. C., Low, K. B., Magasanik, B., Reznikoff, W. S., Riley, M., Schaecter, A. & Umbarger, H. E. (Am. Soc. Microbiol., Washington, DC), 1263–1286.	
	9	Luo, D., et al., "In vitro and in vivo secondary structure probing of the thrS leader in Bacillus subtilis", (1998) Nucleic Acids Res. 26, 5379–5387.	
	10	Nelson et al., "IRNA regulation of gene expression: Interactions of an mRNA 5'-UTR with a regulatory tRNA", (2006) RNA, 12, 1-8.	
1	11	Oi, Y. & Hulett, F. M. "PhoP-P and RNA polymerase oA holoenzyme are sufficient for transcription of Pho reguion promoters in bacillus subtilis: PhoP-P activator sites within the coding region stimulate transcription in vitro", (1998) Mol. Microbiol. 28, 1187–1197.	

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

( Not for submission under 37 CFR 1.99)

Application Number		10617979		
Filing Date		2003-07-11		
First Named Inventor Hen		kin et al.		
Art Unit		1637		
Examiner Name San		nuel C. Woolwine	-	
Attorney Docket Number		22727/04130		

/S.W./		12	Rollins, S. M., et al., "Analysis of cis-acting sequence and structural elements required for antiterminatin of the bacillus subtilis tyrS gene", (1997) Mol. Microbiol. 25, 411–421.		
		13	Winkler, W. C., et al., "The GA motif, an RNA element common to bacterial antitermination systems, rRNA, and eukaryotic RNAs", (2001) RNA 7, 1165–1172.		
		14	Yousef et al., "Structural transitions induced by the interaction between tRNAGLY and the bacillus subtilis glyQS T box leader RNA", (2005) J Mol Biol, 349, 273-287.		
		15	Henkin et al., "Sensing Metabolic Signals with nascent RNA transcripts: the T-box and S-box riboswitches as paradigms", (2007) Cold Spring Harbor Symposia on Quantitative Biology, vol. LXXI, 1-7.		
		16	Grundy, F. J. & Henkin, T. M. "tRNA as a positive regulator of transcription antitermination in B. subtilis", (1993) Cell 74, 476–482.		
		17	Anagnostopoulos, C. & Spizizen, J. "Requirements for Transformation in Bacillus Subtilis", (1981) J. Bacteriol. 81, 741-746.		
		18	Ban et al., "The Complete Atomic Structure of the Large Ribosomal Subunit at 2.4 A Resolution", (2000) Science 289, 905-920.		
		19	Friedman, D. I. & Court, D. L. "Bacterlophage lambda: alive and well and still doing its thing", (2001) Curr. Opin. Microbiol. 4, 201-207.		
		20	Giege et al., "Universal rules and Idiosyncratic features in tRNA Identity", (1998) Nucleic Acids Res. 26, 5017-5035.		-
		21	Grundy et al., "Regulation of the Bacillus subtilis Acetate Kinase Gene by CcpA", (1993) J. Bacteriol, 175, 7348-7355.		
1	/	22	Ogle et al., "Recognition of Cognate Transfer RNA by the 30S Ribosomal Subunit", (2001) Science 292, 897-902.		

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

( Not for submission under 37 CFR 1.99)

Application Number		10617979		
Filing Date		2003-07-11		
First Named Inventor Henki		n et al.		
Art Unit		1637		
Examiner Name	Samu	lel C. Woolwine		
Attorney Docket Numb	er	22727/04130		

/8	.W./	Qiu et al., "The tRNA-binding moiety in GCN2 contains a dimerization domain that interacts with the kine and is required for tRNA binding and kinase activation", (2001) EMBO J. 20, 1425-1438.		th the kinase domain						
		24		Rhodes, G. & Chamberlin, M. J. "Ribonucleic Acid Cain Elongation by Escherichia coli Ribonucleic Acid Polymerase", (1974) J. Biol. Chem. 249, 6875-6883.						
		25		Sankaranarayanan et al., "The Structure of Threonyl-IRNA Synthetase-IRNA Complex Enlightens Its Repressor Activity and Reveals an Essential Zinc Ion in the Active Site", (1999) Cell 97, 371-381.						
		26		Trelber, D. K. & Williamson, J. R. "Beyond kinetic traps in RNA folding", 82, 221-230.(2001) Curr. Opin. Struct. Biol. 11, 309-314.						
		27		Weeks, K. M. & Cech, T. R. "Protein Facilitation of Group I Intron Splicing by Assembly of the Catalytic Core and the 5' Splice Site Domain", (1995) Cell 82, 221-230.						
1	/	28	Guerrier-Takada et al., "The RNA Molety of Ribonuclease P Is the Catalytic Subunit of the Enzyme", (1983) Cell 35, 849-857.							
If y	ou wis	h to a	dd add	ditional non-patent literature document citation information p	lease click the Add b	outton				
				EXAMINER SIGNATURE						
Exa	miner	Signa	ture	/Samuel Woolwine/	Date Considered	05/05/2008				
*E>	AMIN	ER: In	itial if	reference considered, whether or not citation is in conformation	ance with MPEP 609	Draw line through a				

citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. 2 Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Septicant is to place a check mark here if English language translation is attached.